Case No.: 56948US025

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:

Hsu, Yong

Application No.:

Group Art Unit:

Unknown

Filed:

February 5, 2004

Examiner:

Unknown

Title:

METHOD AND MATERIALS FOR PATTERNING OF AN AMORPHOUS,

NON-POLYMERIC, ORGANIC MATRIX WITH ELECTRICALLY ACTIVE

MATERIAL DISPOSED THEREIN

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. Copies of any cited foreign patents, non-patent literature, and unpublished US application documents are enclosed. Pursuant to the waiver in the Pre-OG Notice, dated July 11, 2003, copies of US patents and published US patent applications are no longer required and are not enclosed. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

Applicants also bring to the Examiner's attention U.S. Serial No. 09/662,980, filed September 15, 2000 in the name of Nirmal et al., for Selective Thermal Transfer of Light Emitting Polymer Blends.

Respectfully submitted,

February 5, 2004

Date

Steven E. Skolnick, Reg. No.: 33,789

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Office of Intellectual Property Counsel 3M Innovative Properties Company Facsimile No.: 651-736-3833

Substitute for form 1449A/PTO (modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	
Filing Date	February 5, 2004
First Named Inventor	Hsu, Yong
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Attorney Case Number	56948US025

	U.S. Patent Documents					
Exam. Init.*	Cite No.	Document Number Doc. Number-(Kind Code if Known	Publication Date or Issue Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	A1	US - 4,252,671	02/24/1981	Smith		
	A2	US - 5,166,024	11/24/1992	Bugner et al.		
	А3	US - 5,256,506	10/26/1993	Ellis et al.		
	A4	US - 5,281,489	10/25/1994	Mori et al.		
	A5	US - 5,351,617	10/04/1994	Williams et al.		
	A6	US - 5,621,131	04/15/1997	Kreuder et al.		
	A7	US - 5,693,446	12/02/1997	Staral et al.		
	A8	US - 5,695,907	12/09/1997	Chang		
	A9	US - 5,708,130	01/13/1998	Woo et al.		
	A10	US - 5,710,097	01/20/1998	Staral et al.		
	A11	US - 5,725,989	03/10/1998	Chang et al.		
-	A12	US - 5,728,801	03/17/1998	Wu et al.		
	A13	US - 5,840,217	11/24/1998	Lupo et al.		
-	A14	US - 5,869,350	02/09/1999	Heeger et al.		
	A15	US - 5,900,327	05/04/1999	Pei et al.		
	A16	US - 5,929,194	07/27/1999	Woo et al.		
	A17	US - 5,998,085	12/07/1999	Isberg et al.		
	A18	US - 6,030,715	02/29/2000	Thompson et al.		
	A19	US - 6,114,088	09/05/2000	Wolk et al.		
	A20	US - 6,132,641	10/17/2000	Rietz et al.		
	A21	US - 6,150,043	11/21/2000	Thompson et al.		
	A22	US - 6,169,163	01/02/2001	Woo et al.		
	A23	US - 6,194,119	02/27/2001	Wolk et al.		
	A24	US - 6,214,520	04/10/2001	Wolk et al.		
	A25	US - 6,221,543	04/24/2001	Guehler et al.		

Examir	ıer
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Date Considered:

EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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U.S. Patent Documents					
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	A26	US - 6,221,553	04/24/2001	Wolk et al.	
	A27	US - 6,228,543	05/08/2001	Mizuno et al.	
	A28	US - 6,228,555	05/08/2001	Hoffend, Jr. et al.	
	A29	US - 6,242,115	06/05/2001	Thomson et al.	
	A30	US - 6,242,152	06/05/2001	Staral et al.	
	A31	US - 6,284,425	09/04/2001	Staral et al.	
	A32	US - 6,358,664	03/19/2002	Nirmal et al.	
*	A33	US - 6,416,887	07/09/2002	Tokito et al.	
	A34	US - 6,485,884	11/26/2002	Wolk et al.	
	A35	US - 6,521,324	22/18/2003	Debe et al.	

Foreign Patent Documents							
Exam. Init.*	Cite No	Foreign Patent Document		Publication Date MM-DD-YYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where	Translation (Check if
		Ctry. Code	Number-Kind(Code (if known)			Relevant Passages or Relevant Figures Appear	yes)
	B1	EP	0851714	07/01/1998			
	B2	EP	1003354	05/24/2000			
	В3	EP	1146574	10/17/2001			
	B4	wo	98/55561	12/10/1998	<u> </u>		
	B5	wo	99/21935	05/06/1999			
	В6	wo	99/40655	08/12/1999			
	B7	wo	00/03565	01/20/2000			
	B8	wo	00/18851	04/06/2000			
	В9	wo	00/41894	07/20/2000			
	B10	wo	00/70655	11/23/2000			
	B11	wo	01/83410	11/08/2001			
	B12	JP	2000-195673	07/14/2000			

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		Other Prior Art Non Patent Literature Documents
Exam. Init.*.	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	C1	Baldo, M.A., et al., "Highly efficient phosphorescent emission from organic electroluminescent devices," Nature, vol. 395, pp. 151-154 (Sept. 10, 1998)
	C2	Baldo, et al., "Phosphorescent materials for application to organic light emitting devices", Pure Appl. Chem. Vol 71, No. 11, pp. 2095-2106 (1999)
	С3	Chen, et al., "Recent Developments in Molecular Organic Electroluminescent Materials" Macromol. Symp. 125, pp. 1-48 (1997)
	C4	Contoret et al., The Photopolymerization and Cross-Linking of Electroluminescent Liquid Crystals Containing Methacrylate and Diene Photopolymerizable End Groups for Multilayer Organic Light-Emitting Diodes," Chem. Mater., vol. 14, pp. 1477-1487 (2002)
	C5	Friend, et al., "Electroluminescence in Conjugated Polymers" Nature, Vol. 397, (1999), pp. 121-128
	C6	Fujikawa, et al., "Energy structures of triphyenylamine oligomers", <u>Synthetic Metals</u> , 91, p. 161-162 (1997)
	C7	Grazulevicius, et al., "Charge-Transporting Polymers and Molecular Glasses", <u>Handbook of Advanced Electronic and Photonic Materials and Devices</u> , H.S. Nalwa (ed.), 10, pp. 233-274 (2001)
	C8	Kim, et al., "Novel fluorine-based polymers containing acetylene units", <u>Synthetic Metals</u> , 119 (2001) pp. 105-106
	C9	Kraft, et al., "Electroluminescent Conjugated Polymers—Seeing Polymers in a New Light", Angew. Chem. Int. Ed., 37, pp. 402-428 (1998)
	C10	Kreger et al., "Novel starshaped molecules based on fluorine", Synthetic Metals, 119, pp. 163-165 (2001)
	C11	Roitman et al., "Polymer Thermosetting Organic Light-Emitting Devices," <u>IEEE J. of Selected Topics in Quantum Electronics</u> , vol. 4, no. 1, pp. 58-66 (1998)
	C12	Robinson et al., "Electroluminescence from Well-Defined Tetrahedral Oligophenylenevinylene Tetramers", <u>Adv. Mat.</u> , (2000), 12(22), p. 1701-1704
	C13	Sainova, et al., "Control of color and efficiency of light-emitting diodes based on polyfluorenes blended with hole-transporting molecules", <u>Applied Physics Letters</u> , Vol. 76, No. 14, pp. 1810-1812 (2000)
	C14	Shirota, "Organic materials for electronic and optoelectronic devices", <u>J. Mater. Chem.</u> , 10, pp. 1-25, (2000)
	C15	Tanaka, et al., "Preparation of hyperbranched copolymers constituted of triphenylamine and phyenylene units", Synthetic Metals, 119 (2001) pp. 139-140
	C16	Tang, et al., "Electroluminescence of doped organic thin films", <u>J. Appl. Phys.</u> , Vol. 65, No. 9, (1989) pp. 3610-3616

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